

What Is Claimed Is:

1. An apparatus for determining the total mass of a vehicle (1), the apparatus being configured to determine the total mass of a vehicle (1), wherein the apparatus has distributed weight sensors (3 to 7) for determining a load mass, and a memory (208) for outputting the curb mass of the vehicle (1), and the apparatus is configured to relay a value for the total mass to at least one additional vehicle system (214 to 218).
2. The apparatus as recited in Claim 1, the distributed weight sensors (3 to 7) are configured for determining the respective weight of each individual occupant as well as a payload, the apparatus having means (209) for determining a mass from a weight.
3. The apparatus as recited in Claim 2, wherein the distributed weight sensors (3 to 7) are located in the seats and on a cargo surface.
4. The apparatus as recited in Claim 3, wherein the cargo surface is located in the trunk and/or is implemented in a roof rack.
5. The apparatus as recited in one of the foregoing claims, wherein the at least one vehicle system is connectable to a pre-crash sensing system, the at least one vehicle system being configured to determine a kinetic energy from the total mass and a value for the relative velocity between the vehicle and another object.
6. The apparatus as recited in Claim 5, wherein the at least one vehicle system (209) relays the kinetic energy and/or the total mass to a braking system (215, 216) and/or an electronic stability program (217) and/or a restraint system (218).
7. The apparatus as recited in one of the foregoing claims, wherein the apparatus is configured to determine the center of mass, the center of mass being accessible to the at least one vehicle system.
8. The apparatus as recited in Claim 1, wherein the distributed weight sensors are embodied as wheel bearing load sensors.